
9. Speedy

Program Name: Speedy.java

Input File: speedy.dat

There are N people in a race. Some people have slow reaction times, and thus they start the race at different times. Because they all train differently, they all have different max running speeds. When the participants start the race, they immediately reach their max running speed. In the nature of the racing spirit, every time someone passes another person, the trailing person yells “Hey!” in hopes of slowing down the other (this effort has no effect). You as an observer of the race want to determine how many “Hey!”s have been yelled at a given time, T .

Input

The first line contains an integer C to denote the number of test cases. For the following C test cases, each test case starts with two integers, N T . The following N lines, each line follows the format of `start_time speed` to denote the start time and speed of the racer.

Output

Print out the number of “Hey!”s that have been yelled at time T .

Constraints

$1 \leq C \leq 10$
 $1 \leq N \leq 20$
 $10 \leq T \leq 10,000$
 $0 \leq \text{start_time} \leq 10,000$
 $1 \leq \text{speed} \leq 10,000$
 $\text{start_time} \leq T$

Example Input File

```
3
4 10
0 4
1 2
3 10
2 3
4 100
0 50
1 25
2 12
3 6
8 10000
9564 355
634 8324
1512 133
3524 959
1289 735
846 4604
5115 8283
9753 9216
```

Example Output to Screen

```
4
0
6
```